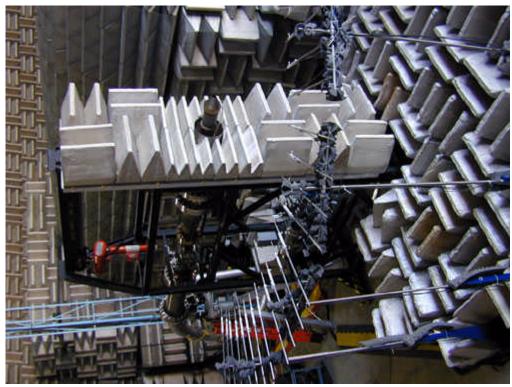
Small Hot Jet Acoustic Rig Commissioned Into Service



Vertical perspective of Small Hot Jet Acoustic Rig at Glenn's Aeroacoustic Propulsion Laboratory.

A new test stand, the Small Hot Jet Acoustic Rig, was commissioned into service at NASA Glenn Research Center's Aeroacoustic Propulsion Laboratory. This new rig provides researchers with an all-in-one platform with which to economically evaluate the thrust performance, acoustic performance, and plume turbulence characteristics of new nozzle concepts. It features an integral force balance, exceptionally low internal flownoise, and provisions to conduct laser-based plume turbulence studies with Particle Imaging Velocimetry, shadowgraphs, schlieren photography, and other techniques. The rig also features an integral combustor and can deliver air to the test nozzle at temperatures ranging from ambient to 1300 °F. The Small Hot Jet Acoustic Rig is the fourth semipermanent rig now residing in the Aeroacoustic Propulsion Laboratory. It will add to the facility's substantial list of acoustic research capabilities and improve its already impressive productivity.



Horizontal perspective of Glenn's Small Hot Jet Acoustic Rig.

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